

WHAT IS CLAIMED IS:

1. Biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide
5 hemihydrate.
2. A crystalline biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate
of Claim 1 further characterized by the X-ray powder diffraction pattern comprising a
10 peak at 5.2, 6.2, 12.6, 14.0, 15.6, 17.0, 18.8, 19.6, 20.0, or 22.6 ($\pm 0.1^\circ 2\theta$).
3. A crystalline biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate
of Claim 1 further characterized by the X-ray powder diffraction pattern comprising
15 peaks at 5.2 and 6.2 ($\pm 0.1^\circ 2\theta$).
4. A crystalline biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate
of Claim 1 further characterized by the X-ray powder diffraction pattern comprising
20 peaks at 15.6 and 18.8 ($\pm 0.1^\circ 2\theta$).
5. A crystalline biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate
of Claim 1 further characterized by the X-ray powder diffraction pattern comprising
25 peaks at 5.2, 6.2, 12.6, 15.6, 18.8, and 20.0 ($\pm 0.1^\circ 2\theta$).
6. A crystalline biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate
of Claim 1 further characterized by the X-ray powder diffraction pattern comprising
30 peaks at 5.2, 6.2, 12.6, 14.0, 15.6, 17.0, 18.8, 19.6, 20.0, and 22.6 ($\pm 0.1^\circ 2\theta$).
7. A pharmaceutical composition comprising biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide
hemihydrate and a pharmaceutically acceptable diluent.

8. A pharmaceutical composition comprising the biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate of any one of Claims 2-6 and a pharmaceutically acceptable diluent.

10. A method of treating disorders associated with the muscarinic receptors comprising administering to a patient in need thereof an effective amount of biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate.

11. A method of treating disorders associated with the muscarinic receptors comprising administering to a patient in need thereof an effective amount of the biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate of any one of Claims 2-6.

12. A method of treating cognitive disorders comprising administering to a patient in need thereof an effective amount of biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate.

13. A method of treating cognitive disorders comprising administering to a patient in need thereof an effective amount of the biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate of any one of Claims 2-6.

14. A method of treating Alzheimer's disease comprising administering to a patient in need thereof an effective amount of biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate.

15. A method of treating Alzheimer's disease comprising administering to a patient in need thereof an effective amount of the biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino)ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate of any one of Claims 2-6.

16. A method of treating schizophrenia comprising administering to a patient in need thereof an effective amount of biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino]ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate.

17. A method of treating schizophrenia comprising administering to a patient in need thereof an effective amount of the biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino]ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate of any one of Claims 2-6.

18. A method of treating mild cognitive impairment comprising administering to a patient in need thereof an effective amount of biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino]ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate.

19. A method of treating mild cognitive impairment comprising administering to a patient in need thereof an effective amount of the biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino]ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate of any one of Claims 2-6.

20. A method of treating cognitive impairment associated with schizophrenia comprising administering to a patient in need thereof an effective amount of biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino]ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate.

21. A method of treating cognitive impairment associated with schizophrenia comprising administering to a patient in need thereof an effective amount of the biphenyl-4-carboxylic acid (R)-(6-(1-((4-fluorobenzyl)methylamino]ethylideneamino)-2(R)-hydroxyindan-1-yl)amide hemihydrate of any one of Claims 2-6.